REMARKS

The Examiner is thanked for the thorough examination of the application. The specification has been amended to improve the format.

Claims 9-26 are pending in the application. Claims 9-18 have been amended to improve the language in a non-narrowing fashion. Claims 19-26 are newly presented for consideration on the merits. New claims 19-22 find support in Figure 1 and at page 5, lines 9-12 of the specification. New claims 23 and 24 find support at page 6, lines 8-16 of the specification. New claims 25 and 26 find support at page 10, lines 3-5 of the specification. No new matter is believed to be added.

Rejection Under 35 USC §112, First Paragraph

Claims 11 and 15 have been rejected under 35 USC §112, first paragraph as not being enabled. This rejection is respectfully traversed.

The Official Action asserts that predetermined functions A, B, C, F, G and H do not include sufficient units of measure.

However, it should be noted that the mass of gas (Nam) passing through a cylinder is given in equation (d):

$$\text{(d)} \quad Nam = \frac{V_{BDC} \times MAP}{R \times T_c} - \frac{V_{TDC} \times Pb}{R \times T_{exh}}$$

as is defined at page 8 of the specification.

If a mass of air flowing into a cylinder (4) per unit of time (MafCyl) is to be calculated, then the mass of gas (Nam) is linked with the rotation speed of the engine. So equation (e) is introduced to reflect this consideration:

(e) $MafCyl = f(N) \times g(T_c) \times MAP - h(N) \times k(AMP) \times l(T_{exh})$

One can observe that equation (e) is similar to equation (d), despite the fact that engine speed has now been introduced.

However, the relation between the mass of gas (Nam) and the engine speed (N) is not always linear (and varies from one engine type to another), and functions A, B, C, F, G and H have been introduced. As a result, these functions cannot be explicitly set forth to cover different engine types.

On the other hand, these functions can be accurately set for each and every engine type, i.e., all the engines of a series, during testing. These functions are then stored in the E.C.U (engine control unit) and can be used, for example, when calculating P_{exh}.

As a result, claims 11 and 15 are sufficiently enabled so that one of ordinary skill can practice the invention without undue experimentation.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Under 35 USC §112, Second Paragraph

Claim 13 has been rejected under 35 USC §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The Official Action asserts that the term "or the like" renders claim 13 indefinite. However, claim 13 has been amended to remove this term. Claim 13 is thus clear, definite and has full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejections Based On KOLMANOVSKY et al.

Claims 9, 10, 12-14, 16 and 17 have been rejected under 35 USC §102(b) as being anticipated by KOLMANOVSKY et al. (U.S. Patent 6,035,640). Claims 11, 15 and 18 have been rejected under 35 USC §103(a) as being unpatentable over KOLMANOVSKY et al. These rejections are respectfully traversed.

The present invention pertains to an air supply control method for a turbocharged engine where a pressure value is determined as a function of other values. Independent claim 9 of the present invention recites, in part, "a pressure in the exhaust manifold (22) is determined as a function of the pressure in the intake manifold (20), an engine speed, and temperatures in cylinders (4) and in the exhaust manifold (22)." Independent claim 13 of the present invention recites, in part, "the pressure

in the intake manifold (20) is determined on the basis of an exhaust pressure measured as a function of an engine speed and temperatures in the cylinders (4) and in the exhaust manifold (22)."

KALMANOVSKY et al. pertains to a control method for turbocharged diesel engines. KALMANOVSKY et al. fails to teach or suggest how pressure in the intake or exhaust manifold can be calculated from other parameters.

KALMANOVSKY et al. at column 6, lines 48-51 states: "In equations (10) and (11), the intake and exhaust manifold pressure signals P_m and P_{exh} are assumed to be measured or estimated values." Although KALMANOVSKY mentions "estimated values," this reference fails to disclose or suggest how intake and exhaust manifold pressures are to be determined, such as are set forth in independent claims 9 and 13 of the present invention.

As a result, KALMANOVSKY et al. neither anticipates nor renders *prima facie* unpatentable independent claims 9 and 13 of the present invention. Claims depending upon claims 9 or 13 are patentable for at least the above reasons.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

New Claims

Claims 19-26 have been added by this amendment. It is believed that these new claims are instantly allowable at least

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by virtue of their dependence on allowable claims 9 and 13, which have been discussed above.

Conclusion

The Examiner is thanked for considering the Information Disclosure Statement filed April 10, 2006 and for making an initialed PTO-1449 Form of record in the application.
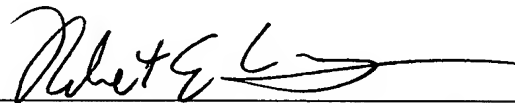
The prior art of record but not utilized is believed to be non-pertinent to the current claims.

The rejections are believed to be overcome, obviated or rendered moot, and that no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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